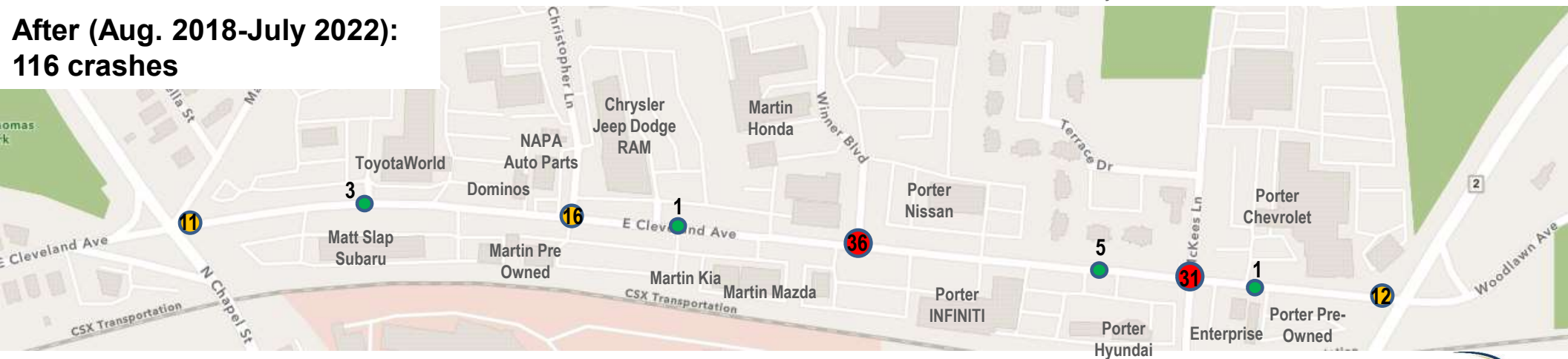


# Cleveland Ave Road Diet Before/After Crash Summary

**Before (Jan. 2011-Aug. 2018):  
278 crashes**

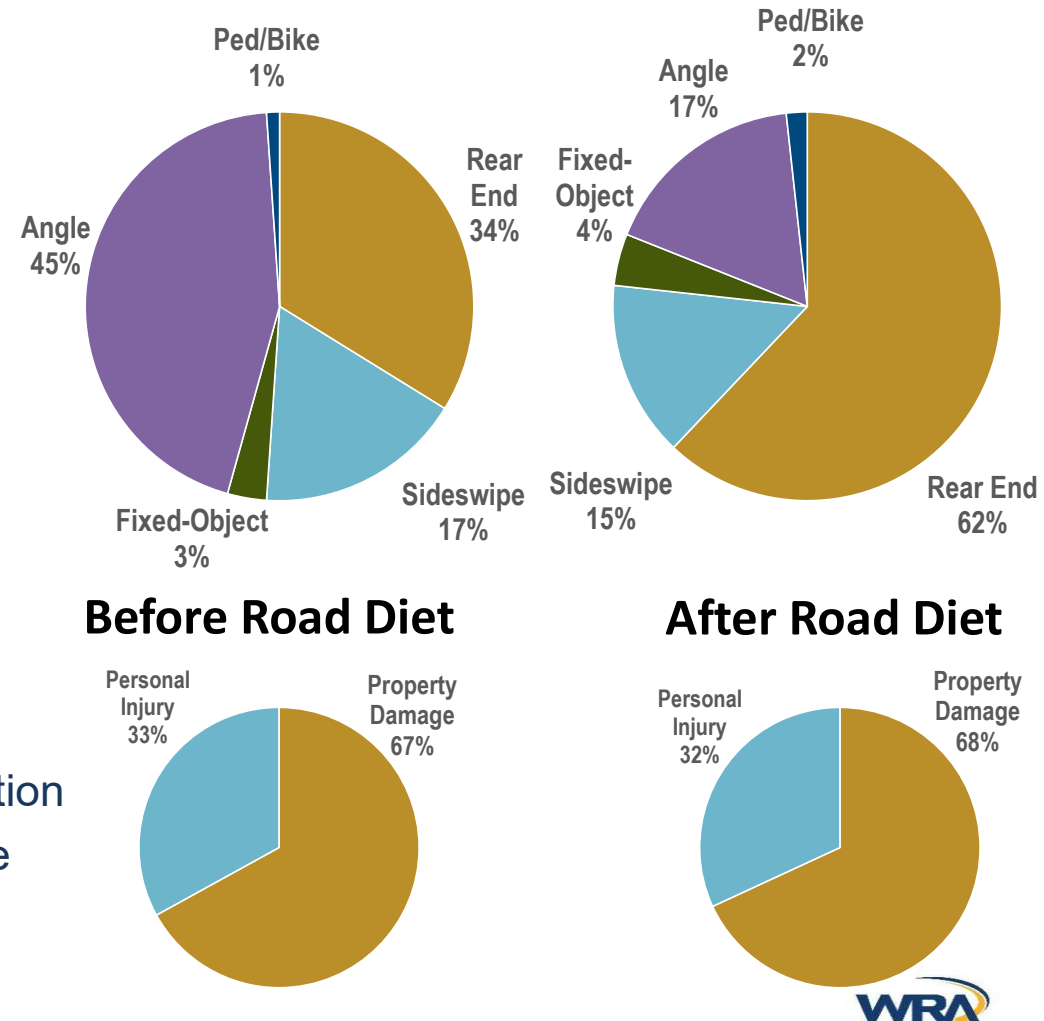


**After (Aug. 2018-July 2022):  
116 crashes**



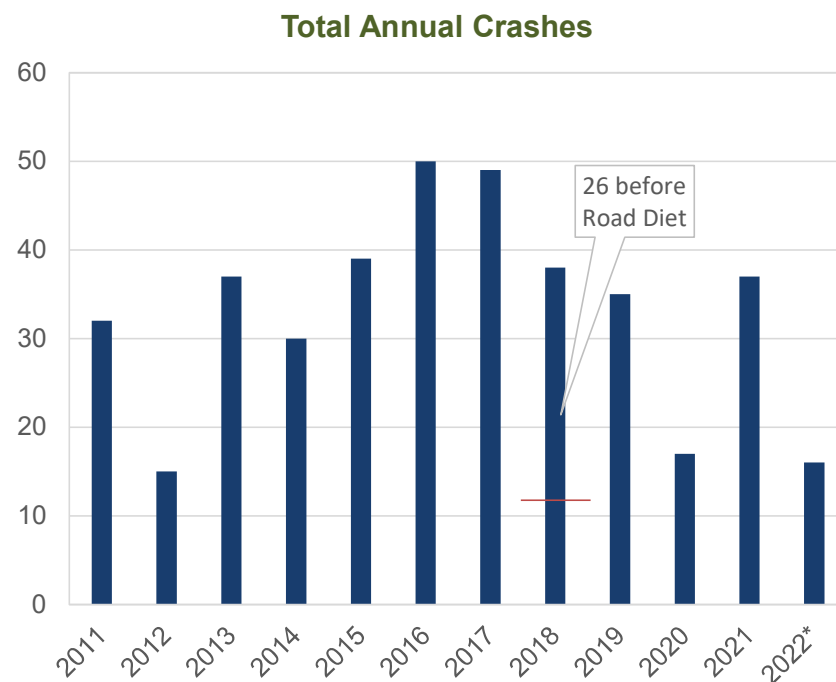
## Cleveland Ave Road Diet Before/After Crash Trends

- 278 crashes before Road Diet (1/1/2011 – 8/6/2018)  
**approx. 36 crashes/year**
  - 114 crashes from 1/1/2011 – 12/31/2014 (initial HEP study)
  - 164 crashes from 1/1/2015 – 8/6/2018
- 1 crash during Road Diet construction
- 116 crashes after Road Diet (8/7/2018 – 7/22/2022)  
**approx. 29 crashes/year**
  - 37 crashes during Main St Construction
  - 17 crashes during W Cleveland Ave construction
  - 19 crashes during W Cleveland Ave + DE Ave construction



## Cleveland Ave Annual Crash Trends

- Overall, the number of crashes has not decreased significantly; however:
  - Angle crashes have dropped from approx. **16 crashes/year** to only **5 crashes/year**
  - Midblock crashes at the dealership entrances have decreased to less than **3 crashes/year**
  - There have been **zero** crashes east of Christopher Lane where previously there were approx. **5 crashes/year** entering the Dominos/Napa Auto Parts
- Rear end crashes at Winner Boulevard have increased from approx. **2 crashes/year** to approx. **7 crashes/year**



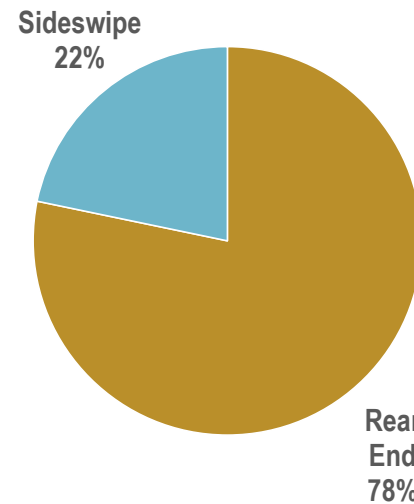
# N Chapel St/Paper Mill Rd/Margaret St

## Total\*:

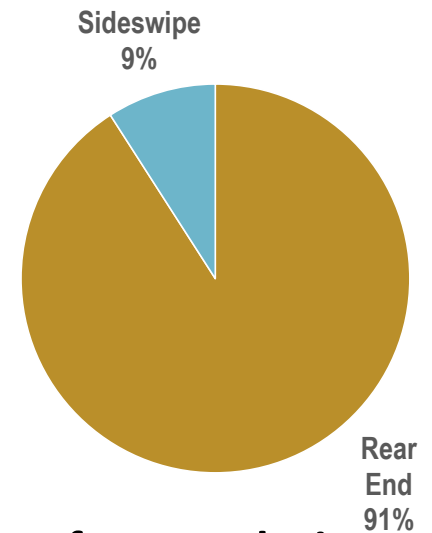
- 23 crashes before Road Diet – approx. **3 crashes/year**
- 11 crashes after Road Diet – approx. **3 crashes/year**

- Rear end crashes
  - 18 before Road Diet
  - 10 after Road Diet
- Sideswipe crashes
  - 5 before Road Diet
  - 4 after Road Diet

\*The crash area was reduced to focus on the effects of the road diet, thus not all crashes that occurred at this intersection are included.



**Before Road Diet**



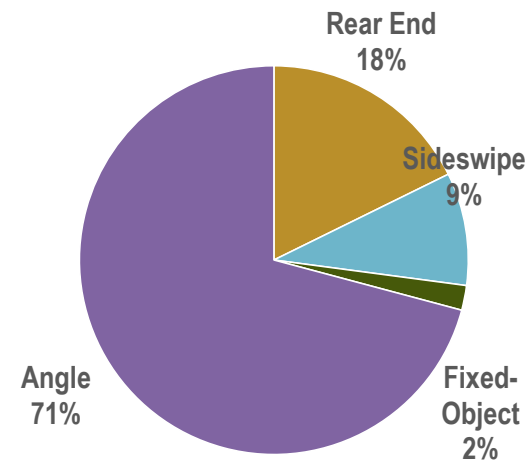
**After Road Diet**

# Christopher Drive

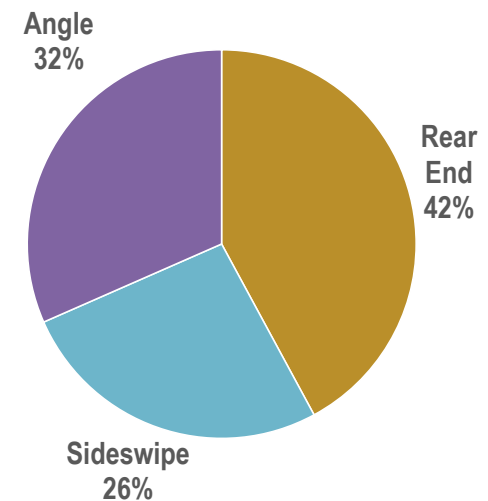
## Total:

- 96 crashes before Road Diet – approx. **13 crashes/year**
- 19 crashes after Road Diet – approx. **5 crashes/year**

- Angle crashes
  - 68 before Road Diet
  - 6 after Road Diet
- Rear end crashes
  - 17 before Road Diet
  - 8 after Road Diet
- Sideswipe crashes
  - 9 before Road Diet
  - 5 after Road Diet



**Before Road Diet**



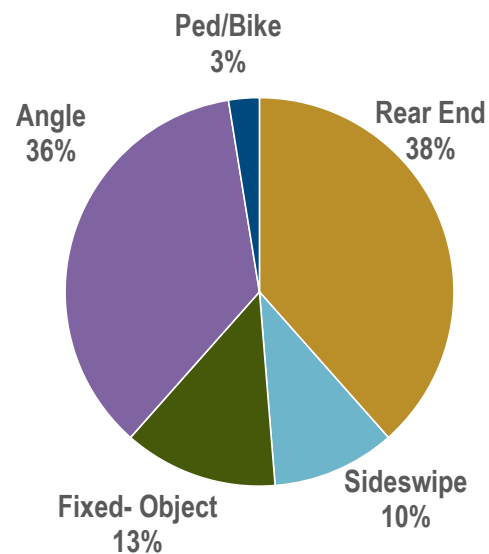
**After Road Diet**

# Winner Boulevard

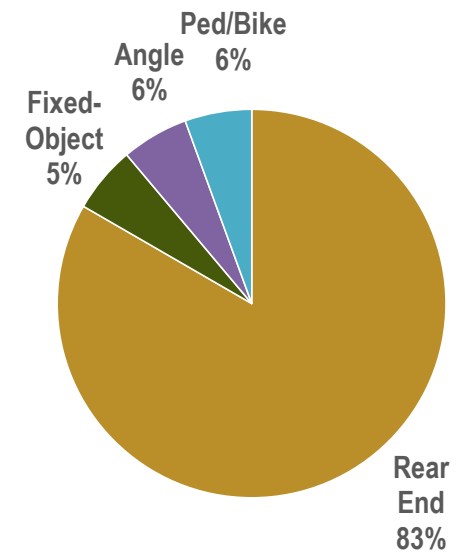
## Total:

- 39 crashes before Road Diet – approx. **5 crashes/year**
- 37 crashes after Road Diet – approx. **9 crashes/year**

- Angle crashes
  - 14 before Road Diet
  - 3 after Road Diet
- Rear end crashes
  - 15 before Road Diet
  - 30 after Road Diet
- Sideswipe crashes
  - 4 before Road Diet



**Before Road Diet**



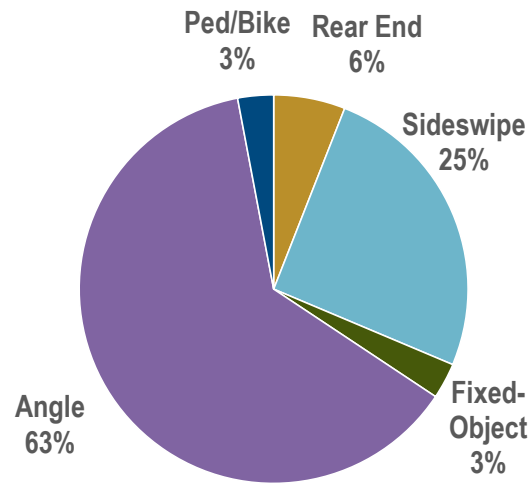
**After Road Diet**

# McKees Lane

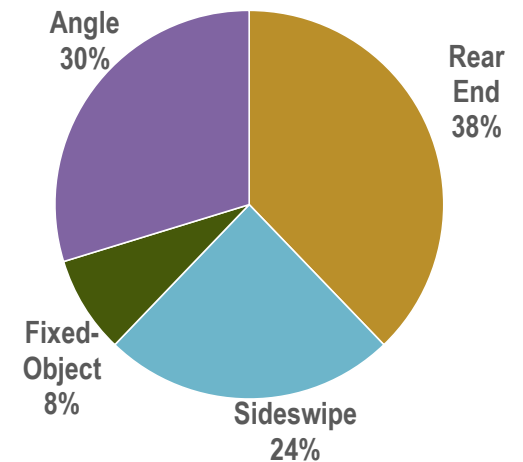
## Total:

- 67 crashes before Road Diet – approx. **9 crashes/year**
- 37 crashes after Road Diet – approx. **9 crashes/year**

- Angle crashes
  - 42 before Road Diet
  - 11 after Road Diet
- Rear end crashes
  - 4 before Road Diet
  - 14 after Road Diet
- Sideswipe crashes
  - 17 before Road Diet
  - 9 after Road Diet



Before Road Diet



After Road Diet

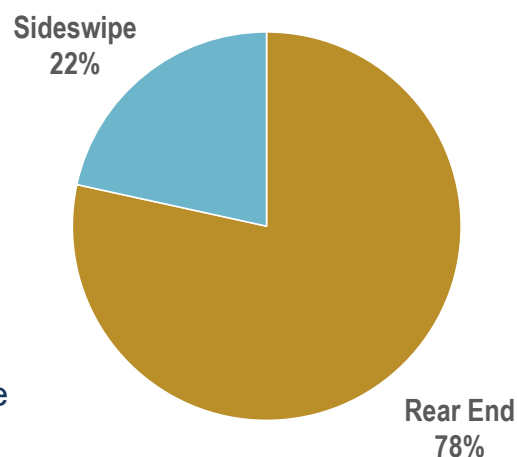
## SR 2 (Capitol Trail)/Library Avenue

### Total\*:

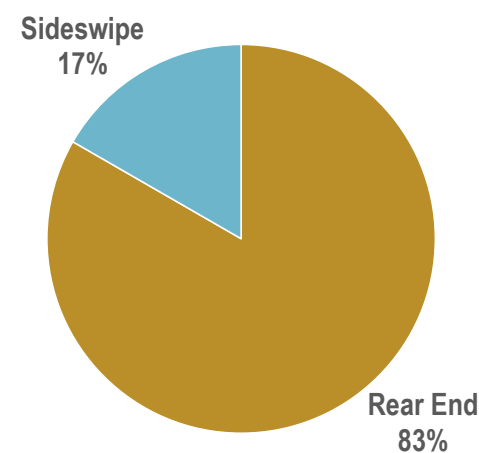
- 53 crashes before Road Diet – approx. **7 crashes/year**
- 12 crashes after Road Diet – approx. **3 crashes/year**

- Rear end crashes
  - 40 before Road Diet
  - 10 after Road Diet
- Sideswipe crashes
  - 13 before Road Diet
  - 2 after Road Diet

\*The crash area was reduced to focus on the effects of the road diet, thus not all crashes that occurred at this intersection are included. See Appendix for additional crash breakdowns based on other intersection improvements.



**Before Road Diet**



**After Road Diet**





# **Cleveland Ave Before/After Crashes**

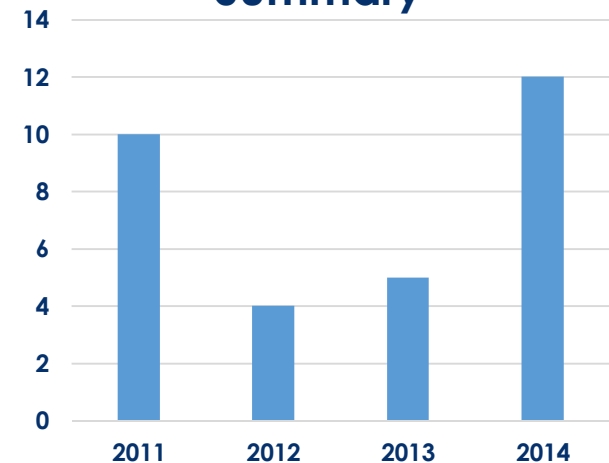
## **Appendix**

## SITE P

Before full intersection reconfiguration & re-phasing

- Crash summary (“before” – 1/1/11 – 5/20/15)
  - Capitol Trail at E. Cleveland Ave/Woodlawn Ave
    - 34 NB left-turn crashes
    - 18 EB rear end crashes
    - 9 EB right-turn/SB sideswipe crashes
    - 7 NB/WB angle crashes
    - 5 EB right-turn rear end crashes
    - 2 EB right-turn/WB left-turn crashes

**NB Left-Turn Crash Summary**



## SITE P

Prior to Woodlawn Ave double left

- Crash summary (“after 1” – 5/21/15 – 10/11/16)
  - Capitol Trail at E. Cleveland Ave/Woodlawn Ave
    - **0 NB left-turn crashes**
    - 4 EB rear end crashes
    - 9 EB right-turn/SB sideswipe crashes
    - **0 NB/WB angle crashes**
    - 3 EB right-turn rear end crashes
    - 7 EB right-turn/WB left-turn crashes

## **S I T E P** After Woodlawn Ave double left

- Crash summary (“after 2” – 10/12/16 – 8/6/18)
  - Capitol Trail at E. Cleveland Ave/Woodlawn Ave
    - **0 NB left-turn crashes**
    - 4 EB rear end crashes
    - 5 EB right-turn/SB sideswipe crashes
    - **0 NB/WB angle crashes**
    - 2 EB right-turn rear end crashes
    - 11 EB right-turn/WB left-turn crashes

## SITE P

After E. Cleveland Ave road diet

- Crash summary (“after 3” – 8/6/18 – 11/13/18) Updated 7/9/2019
  - Capitol Trail at E. Cleveland Ave/Woodlawn Ave
    - 0 NB left-turn crashes
    - 0 EB rear end crashes
    - 0 EB right-turn/SB sideswipe crashes +1
    - 0 NB/WB angle crashes +1
    - 0 EB right-turn rear end crashes
    - 4 EB right-turn/WB left-turn crashes +2

## SITE P

### After EB Right Turn on Red Prohibition

- Crash summary (7/10/19 – 7/22/22)
  - Capitol Trail at E. Cleveland Ave/Woodlawn Ave
    - **0 NB left-turn crashes**
    - **4 EB rear end crashes**
    - **5 EB right-turn/SB sideswipe crashes**
      - 3 cited EB right-turns, 1 with no citation due to conflicting statements, 1 SB fled
    - **1 NB/WB angle crash**
    - **5 EB right-turn rear end crashes**
    - **4 EB right-turn/WB left-turn crashes**
      - 2 cited EB right-turns, 1 with no citation due to conflicting statements, 1 WB left-turn fled

# SITE P

## Summary of Crash Rates

- Each modification to the intersection has reduced the eastbound right-turn crashes
- Increased delays/LOS due to modifications are considered insignificant compared to the safety benefits

	Before	After 1	After 2	After 3	After 4
	1/1/11-5/20/15	5/21/15-10/11/16	10/12/16-8/6/18	8/6/18-7/9/19	7/10/19-7/22/22
Days	1591	510	664	338	1109
Years	4.36	1.40	1.82	0.93	3.04
NBLT	34	0	0	0	0
EB Rear End	18	4	4	0	4
EBRT/SB Sideswipe	9	9	5	1	5
NB/WB Angle	7	0	0	1	1
EBRT Rear End	5	3	2	0	5
EBRT/WBLT Angle	2	7	11	6	4
Total Crashes	75	23	22	8	19
Crashes/Year	17.21	16.46	12.09	8.64	6.25
EBRT Crashes	16	19	18	7	14
Crashes/Year	3.67	13.60	9.89	7.56	4.61